



(51) International Patent Classification⁷: H03L 7/10, 7/189

[NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(21) International Application Number:

PCT/TB2004/052756

(72) Inventors: and

(22) International Filing Date:

10 December 2004 (10.12.2004)

(75) **Inventors/Applicants (for US only):** NITSCHKE, Gunnar [DE/DE]; Philips Intellectual Property &, Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE). AUE, Volker [DE/DE]; Philips Intellectual Property &, Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE). BURY, Andreas [DE/DE]; Philips Intellectual Property &, Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03104837.4

19 December 2003 (19.12.2003) EP

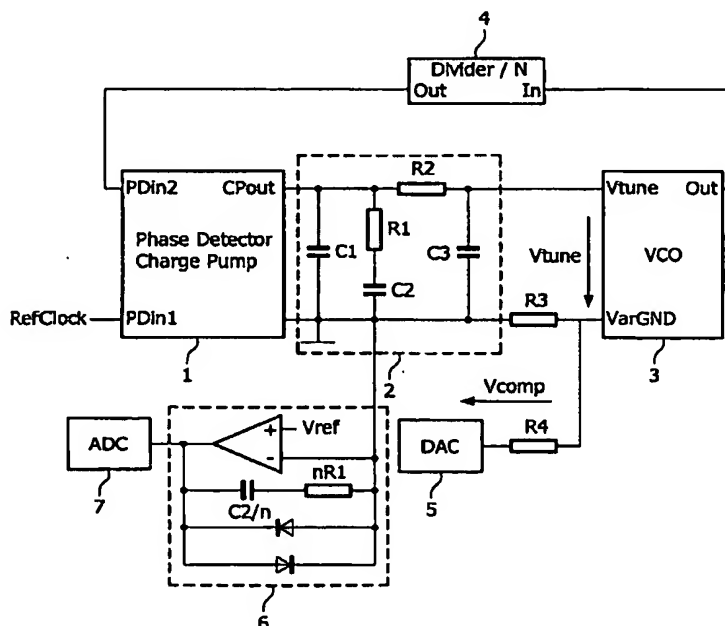
(74) Agents: VOLMER, Georg et al.; Philips Intellectual Property &, Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).

(71) Applicant (for DE only): PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH [DE/DE]; Stein-damm 94, 20099 Hamburg (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,

[Continued on next page]

(54) Title: METHOD AND ARRANGEMENT FOR INTERFERENCE COMPENSATION IN A VOLTAGE-CONTROLLED FREQUENCY GENERATOR



(57) Abstract: The invention, which relates to a method and an arrangement for interference compensation in a phase-locked loop comprising a voltage-controlled frequency generator, wherein the frequency generator is tuned to a nominal frequency by a tuning voltage V_{tune} and whose actual frequency is compared with a reference frequency by means of a frequency comparison and is re-adjusted if a deviation is detected via the frequency comparison, in which case, in the event of interference, the tuning voltage V_{tune} is changed by an interference voltage V_{dist} that depends on the interference event, and thus a frequency deviating from the nominal frequency is generated, which deviating frequency is corrected again by the phase locked loop, is based on the object to provide a method and an arrangement for interference compensation in a phase-locked loop comprising a voltage-controlled frequency generator, with which a deviation from a predefined nominal

frequency is avoided if known interference events occur. The object is achieved in accordance with the invention in a method whereby, if a known interference event occurs, a voltage V_{str} which compensates for the interference voltage V_{comp} , is generated in synchronism with this with sign inversion and is superimposed on the interference voltage V_{str} .